

Work Order ID 130563

Monday, March 16, 2015 11:10:26 AM

130563

Page 1

Item ID: D3280-3L02 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Floor Protector, RH
 Start Date: 3/16/2015 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 3/16/2015 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: MCS Date: 15-03-16 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3280	Rev F								

100
100 HAND FINISHING THERMOFORMING 0.00
 Thermoform Memo 0.00
 Thermoforming Machine Cut Blanks

4 B 15/03/17

105
105 Dry Material 0.00
 HandThermo Memo 0.00
 Hand Finishing Thermoforming Dry Sheet as per QSI022 POLYCARBONATE

Temp: 245
 Time IN: 4:30
 Time OUT: 7:00

B 15/03/17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Monday, March 16, 2015 11:10:26 AM

Page 2

Accept

Setup Start *NS1*

Stop *NS2*

Start Date: 3/16/2015 **Start Qty:** 4.00 ***4***

Cust Item ID:

Required Date: 3/16/2015 **Req'd Qty:** 4.00 ***4***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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110

0.00

110

THERMOFORMING MACHINE

0.00

Thermoform

Thermoforming Machine

Memo

Thermoform as per Dwg. D3280 and Folio FTA 012

Dwg. Rev. _____
Folio Rev. _____

130

0.00

130

HAND FINISHING THERMOFORMING

0.00

Thermoform

Thermoforming Machine

Memo

Trim to Finished Dimensions

140

QC2- Inspect parts off machine FAI/FAIB

0.00

140

QC

Memo

0.00

Quality Control

DQA: _____ Date: _____



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Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Page 3

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Revision ID: Stop ***NS2***
Item Name: Floor Protector, RH
Start Date: 3/16/2015 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 3/16/2015 Req'd Qty: 4.00 ***4*** Customer:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC5- Inspect part completeness to step on W/O	0.00							
150									
QC	Memo	0.00							
Quality Control									
									MAR 20 2015
160	Packaging	0.00							
160									
Packaging	Memo	0.00							
Packaging									
									MAR 20 2015
170	QC21- Final Inspection - Work Order Release	0.00							
170									
QC	Memo	0.00							
Quality Control									

MLJ 15-03-20
15-3-20

DQA: _____ Date: _____



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FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
		☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge
		☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other

Picklist Print

Monday, March 16, 2015 11:10:30 AM

Page 1

Work Order ID: 130563

130563

Parent Item: D3280-3L02

D3280-3L02

Parent Item Name: Floor Protector, RH

Start Date: 3/16/2015

Required Date: 3/16/2015

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev. C Added colour code to D3280-3 11/03/03 DL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.093-F6006-02		Purchased	No			100	sf	1,382.500	4.333	19			

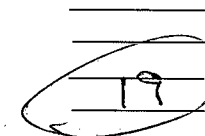
MI FXS 093-F6006-02

GE PLASTICS LEXAN SHEET

**

3/15/03/19

Location	Loc Qty	Loc Code
MAT023	126.5	
m122033	126.5	
therm	1256	
m127208	1256	



DQA: _____ Date: _____



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FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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DART AEROSPACE LTD		Work Order: 130563
Description: FLOOR PROTECTOR		Part Number: D3280-3L02
Inspection Dwg: 3280	Rev: F	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST
THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than "	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: 

Date: 15/03/19

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.25	.100	.246	✓		DL .02	
.95	.100	.973	✓		DL .02	
18.3	.100	18.375	✓		TH .05	
15.8	.100	15.875	✓		1H .05	

Measured by: 

Date: 15/03/19

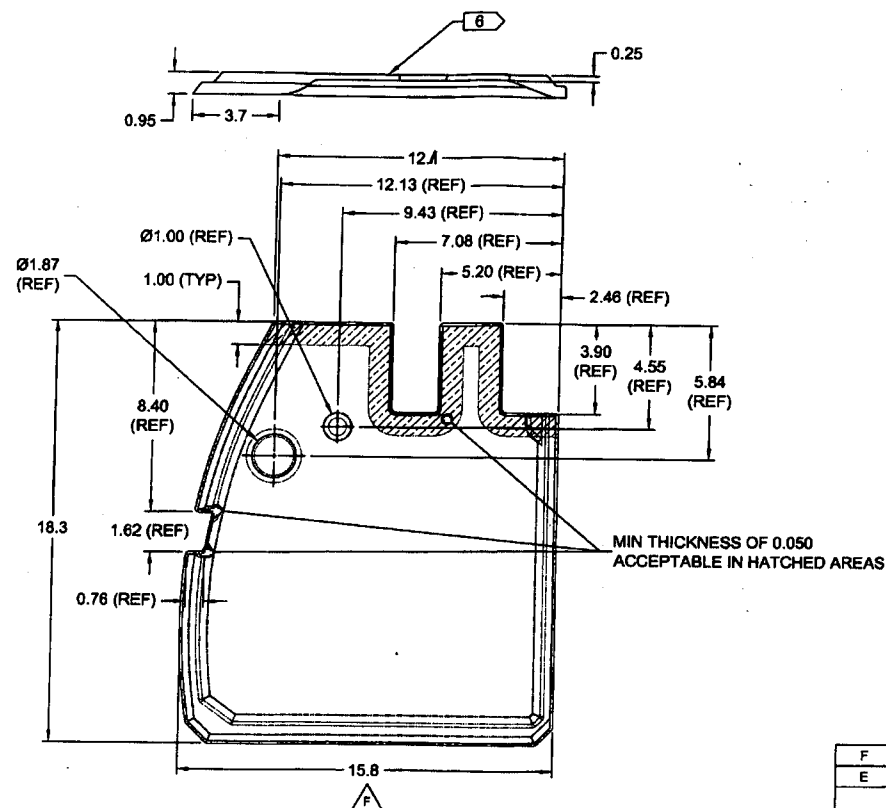
Audited by: DAS 38

Date: MAR 20 2015

Preliminary Approval: 0.89

Date:

Rev	Date	Change	Revised by	Approved
B	10.04.14	Added preliminary approval	KJ	



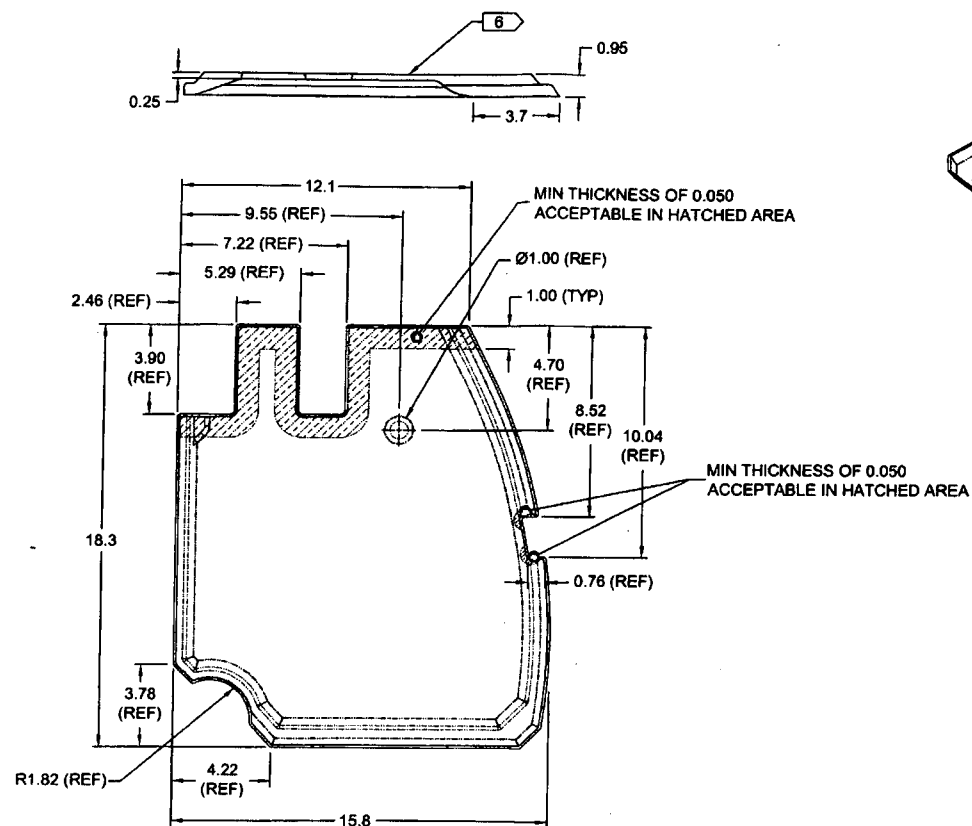
D3280-1 FLOOR PROTECTOR

D3280-1 NOTES:

- 1) MATERIAL: -1L02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6006-02)
-1L08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3280-1Lxx" AND B/N PER QSI 044 6.4
- 7) WEIGHT: D3280-1L02 = 0.94 lb D3280-1L08 = 1.13 lb
- 8) THERMOFORM WITH MOLD D3280-1T1 PER DART QSI 022; TRIM AS SHOWN
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED

130563.MLS
15-03-16
RELEASED
2013-02-19

F	REVISE DIM 18.0 TO 15.8 (ZN B5-1) AS PER CIR12-9	SFM	13.02.05
E	REVISE NOTES (ZN A8-1, A8-2)	RF	11.03.01
D	THICKNESS 0.083 WAS 0.125, MIN. THICKNESS 0.070 WAS 0.080, P/N & B/N ID WITH VIBRATING STYLUS (ZN A7-1, A7-2); CORRECT WEIGHTS (ZN A8-1, A8-2); HOLE SIZE Ø1.88 WAS Ø0.211 (ZN C7-1)	PH	08.03.28
C	UPDATE DIMS TO MATCH PARTS; COLOUR 701 WAS 700; GENERAL UPDATE	LE	07.10.12
B	NOW LEXAN; DIMS AS MANUFACTURED	CP	05.11.25
A	NEW ISSUE	CP	04.05.03
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SFM		
CHECKED	JS	DRAWING NO.	REV. F
MFG. APPR.	DA	D3280	SHEET 1 OF 2
APPROVED	MM	TITLE	SCALE
DE APPR.	MM	FLOOR PROTECTOR	NTS
DATE	13.02.05	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	



D3280-3 FLOOR PROTECTOR

D3280-3 NOTES:

- 1) MATERIAL: -3L02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6006-02)
-3L08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3280-3Lxx" AND B/N PER QSI 044 6.4
- 7) WEIGHT: D3280-3L02 = 0.88 lb D3280-3L08 = 1.03 lb
- 8) THERMOFORM WITH MOLD D3280-3T1 PER DART QSI 022; TRIM AS SHOWN
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED

RELEASE
2013-02-19
MA

DESIGN	CP	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D3280	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		FLOOR PROTECTOR	NTS
DATE	13.02.05	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPILED OR CONSULTED TO ANY OTHER PROGRAM WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	